

authorizations could be improved and whether any of these rules should be eliminated.<sup>385</sup>

**a. Developmental Authorization of 43 MHz Paging Transmitters**

135. *Background.* Sections 22.411 and 22.531(a) provide that 43 MHz channels can be initially assigned only as developmental authorizations.<sup>386</sup> The requirements of Sections 22.411 and 22.531(a) are intended to mitigate interference with the intermediate frequency stages of receivers in television sets and video recorders. Section 22.411 also requires licensees to conduct and file semi-annual surveys during the first two years of operation to determine the extent of any interference to broadcast television receivers.<sup>387</sup> In the *Notice*, we observed that there have been significant technical improvements in television and video recorder receivers, and we sought comment on whether such technical improvements obviate the need for the requirements of Sections 22.411 and 22.531(a).<sup>388</sup>

136. *Discussion.* While no comments were received on this topic, we believe that Sections 22.411 and 22.531(a) are no longer required. Modern NTSC televisions are no longer particularly vulnerable to interference from the 43 MHz paging frequencies. Previously, television sets utilized an intermediate frequency amplifier that converted the received channel to a frequency between 40 and 46 MHz. New television sets, on the other hand, no longer employ this type of technology. In addition, the number of licensees and new applications for these paging channels is minimal. Consequently, it appears that there is no need for developmental authorizations for 43 MHz paging transmitters, and we will delete these sections of our rules.

**b. Developmental Authorization of 928-960 MHz Fixed Transmitters**

137. *Background.* Section 22.415 provides that channels in the 928-931 and 952-960 MHz ranges may be assigned to fixed transmitters in point-to-multipoint systems at short-spaced locations (*i.e.*, those that do not meet the 70-mile separation requirement of Section 22.625(a)).<sup>389</sup> We stated in the *Notice* that the Commission cannot issue any developmental authorizations under Section 22.415 unless it waives the licensing prohibition of Section 22.621.<sup>390</sup> We therefore tentatively concluded that Section 22.415 should be eliminated.<sup>391</sup> We also tentatively concluded that Section 22.625(a) should be revised by eliminating all text following the first sentence that pertains to short-spaced developmental authorizations under Section 22.415.<sup>392</sup> This language would no longer be necessary were we to adopt our proposal to eliminate Section 22.415.

138. *Discussion.* In light of the prohibition in Section 22.621 against licensing any new 900

---

<sup>385</sup> *Id.*

<sup>386</sup> 47 C.F.R. §§ 22.411, 22.531(a).

<sup>387</sup> 47 C.F.R. § 22.411(b).

<sup>388</sup> *Notice*, 18 FCC Rcd at 8399 ¶47.

<sup>389</sup> 47 C.F.R. § 22.415.

<sup>390</sup> *Notice*, 18 FCC Rcd at 8399-40 ¶48. In the *Multiple Address Systems Order*, the Commission amended Section 22.621 to prohibit the issuance of new licenses for any 900 MHz frequencies listed in that section. See In the Matter of Amendment of the Commission's Rules Regarding Multiple Address Systems, *Report and Order*, 15 FCC Rcd 11,956 (2000) ("*Multiple Address Systems Order*"), corrected by Amendment of Commission's Rules Regarding Multiple Address Systems, *Erratum*, 15 FCC Rcd 16415 (WTB, PSPWD 2000).

<sup>391</sup> *Notice*, 18 FCC Rcd at 8399-4000 ¶48.

<sup>392</sup> *Id.*

MHz frequencies, we eliminate Section 22.415 and modify Section 22.625(a) as proposed in the *Notice*. No comments were received on this issue.

**c. Developmental Authorization of Meteor Burst Systems**

139. *Background.* Section 22.417 provides that Rural Radiotelephone Service (RRS) central office and rural subscriber stations in Alaska may use "meteor burst" propagation modes.<sup>393</sup> Meteor burst systems bounce radio signals off the ionized trails of evaporating space rocks to receivers up to 1,000 miles away. Meteor burst technology, however, only works in brief spurts because a typical meteor trail has an average duration of a few hundred milliseconds, while wait times between suitable trails can range from a few seconds to minutes. As such, the technology is well-suited for bursty data transmissions but is not suitable for a continuous voice call. Section 22.725(c) provides that channels 42.40, 44.10, 44.20 and 45.90 MHz may be used for such purposes in Alaska.<sup>394</sup> Section 22.729 governs station operations using meteor burst propagation modes on these channels.<sup>395</sup> In the *Notice*, we indicated that there are no Part 22 licensees on these channels in Alaska, although there are some licenses issued under Part 90.<sup>396</sup> We sought comment as to whether Sections 22.417, 22.725(c), and 22.729 should be eliminated or whether this licensing option for RRS should be maintained.<sup>397</sup>

140. *Discussion.* We do not believe that RRS stations in Alaska would benefit from maintaining the licensing option under Sections 22.417, 22.725(c), and 22.729. Currently, there are no licensees taking advantage of these rules. In addition, as a practical matter, meteor burst propagation cannot be used to transmit voice calls, which is at the core of the RRS. Therefore, as suggested in the *Notice*, we delete these sections from our rules. We also delete the definition of "meteor burst propagation mode" in Section 22.99,<sup>398</sup> the Section 22.313(a)(3) station identification requirements for Rural Radiotelephone Service subscriber stations using meteor burst propagation,<sup>399</sup> and the Section 22.727(f) limits on transmitter output power for meteor burst stations.<sup>400</sup>

**5. Paging and Radiotelephone Service Rules**

**a. Composite Interference Contour Over Water**

141. *Background.* Under Section 1.929(c)(1), any increase in the composite interference contour (CIC)<sup>401</sup> of a site-based licensee in the Paging and Radiotelephone Service, Rural Radiotelephone Service, or 800 MHz Specialized Mobile Radio Service is a major modification of license that requires

---

<sup>393</sup> 47 C.F.R. § 22.417.

<sup>394</sup> 47 C.F.R. § 22.725(c).

<sup>395</sup> 47 C.F.R. § 22.729.

<sup>396</sup> *Notice*, 18 FCC Rcd at 8400 ¶49. Moreover, the 44.20 MHz channel is available under Part 22 only on a secondary basis to operations authorized under Part 90. See 47 C.F.R. § 22.729(a).

<sup>397</sup> *Notice*, 18 FCC Rcd at 8400-8401 ¶50.

<sup>398</sup> 47 C.F.R. § 22.99.

<sup>399</sup> 47 C.F.R. § 22.313(a)(3).

<sup>400</sup> 47 C.F.R. § 22.727(f).

<sup>401</sup> A CIC connects the outermost points of the intersecting interference contours for the base stations in a radio system.

prior Commission approval.<sup>402</sup> In March 2001, the Wireless Telecommunications Bureau conditionally waived Section 1.929(c)(1) to permit expansion of paging CICs over water on a secondary basis.<sup>403</sup> In the *Notice* in the instant proceeding, we tentatively concluded that Section 1.929(c)(1) should be amended to specify that expansion of the CIC of a site-based licensee in these services over water, on a secondary, non-interference basis to any geographic area licensee in the same area, is not a major modification of license.<sup>404</sup> We also tentatively concluded that the term “over water” should be defined as “over bodies of water that extend beyond county boundaries including, but not limited to, oceans, the Gulf of Mexico, and the Great Lakes.”<sup>405</sup>

142. In addition, we expressed concern that the incumbent licensee in the same geographic area have technical and engineering information regarding the site-based licensee’s operations over water in order to guard against unacceptable interference to its own operations.<sup>406</sup> Accordingly, we proposed that the site-based licensee be required to provide to the geographic area licensee on the same frequency the technical and engineering information necessary for the latter entity to understand and evaluate the site-based licensee’s operations over water.<sup>407</sup> We requested comment on the contents of such notification, the timing of making such a notification, whether such a requirement is necessary or excessively burdensome, and whether, instead, any filing with the Commission should be required.<sup>408</sup>

143. *Discussion.* We amend Section 1.929(c)(1) and treat expansions of the CIC of a site-based licensee in the Paging and Radiotelephone Service, Rural Radiotelephone Service, or 800 MHz Specialized Mobile Radio Service over water, on a secondary, non-interference basis to any geographic area licensee in the same area, as a minor, not major, modification of license. We also adopt the definition of “over water” as proposed in the *Notice*.<sup>409</sup> As a result, such expansions of the CIC are permissive and no notification to the Commission is required. As expressed in the comments of Arch Wireless, the classification of these modifications as major can hamper a carrier’s ability to respond to unexpected disruptions or to meet changes in consumer demand.<sup>410</sup> Licensees providing service in coastal areas often need to relocate or adjust transmitting facilities in order to maintain and improve coverage. Moreover, CIC expansions that take place solely over water should pose no risk of interference to other systems on land, and Commission records indicate that we have not received any interference complaints

---

<sup>402</sup> 47 C.F.R. §§ 1.929(c)(1), 1.947. See Karl A. Rinker, d/b/a Rinker’s Communications, *Request for Declaratory Ruling*, 14 FCC Rcd 19546 (WTB, CWD 1999) (any CIC increase, including an extension over water, is a major filing under Section 1.929(c)(1)).

<sup>403</sup> Wireless Telecommunications Bureau Seeks Comment On Request For Rule Change And Conditionally Waives Section 1.929(C)(1) To Permit Expansion Of Paging Contours Over Water On A Secondary Basis, *Public Notice*, 16 FCC Rcd 5563 (2001). The conditional waiver was granted pending a decision on a Request for Rule Change filed by the Personal Communications Industry Association (PCIA). PCIA’s Request sought to amend Section 1.929(c)(1) so that expansions of paging CICs that occur solely (1) beyond the land border of the United States, or (2) over large bodies of water (oceans, gulfs, sounds, bays, and the Great Lakes, but not rivers) would be treated as minor modifications.

<sup>404</sup> *Notice*, 18 FCC Rcd at 8402 ¶52.

<sup>405</sup> *Id.*

<sup>406</sup> *Notice*, 18 FCC Rcd at 8402 ¶53.

<sup>407</sup> *Id.*

<sup>408</sup> *Id.*

<sup>409</sup> *Notice*, 18 FCC Rcd at 8402 ¶52.

<sup>410</sup> Arch Wireless Comments at 4-5; see Blooston Comments at 9.

arising from our current temporary policy of conditionally waiving Section 1.929(c)(1). We also note the benefits to both licensees and the Bureau derived from the removal of these particular regulatory filing requirements. Finally, no commenters opposed this rule change. We believe that, under these circumstances, our action here will facilitate the provision of PMS services to the public.<sup>411</sup>

144. We will not require that site-based licensees automatically notify incumbent geographic area licensees of the technical parameters of a CIC expansion over water. In this connection, we agree with Arch Wireless that such a requirement reduces the flexibility and efficiencies created by not requiring pre-approval of such extensions.<sup>412</sup> In contrast to the objection raised by Arch Wireless, no parties filed comments supporting automatic notification of this information to geographic licensees.

#### **b. Nationwide Network Paging Channels**

145. *Background.* Section 22.531(b) provides that frequencies 931.8875, 931.9125, and 931.9375 MHz may only be used for nationwide network paging service.<sup>413</sup> Section 22.551 specifies the application process for such channels in the event one should become available for licensing, and provides additional rules for nationwide network paging service.<sup>414</sup> In the *Notice*, we sought comment on whether we should amend our rules to allow licensees on these channels to provide services other than nationwide network paging.<sup>415</sup> In addition, we requested comment on whether the specific application processing rule for these channels remains necessary, or whether we should apply our general paging licensing rules to license these channels in the event that one of them (or a partitioned or disaggregated portion thereof) was to become available for re-licensing.

146. *Discussion.* Although no comments were received on this topic, we believe that allowing licensees on these channels to provide services other than nationwide network paging is in line with our policy to facilitate flexible service offerings,<sup>416</sup> our attempts to achieve regulatory parity among competing wireless services, and the highly competitive state of the paging industry. Similarly, we will apply our general paging licensing rules, including competitive bidding procedures, to license these channels in the event that one becomes available for licensing.<sup>417</sup> Therefore, we will delete Sections 22.313(a)(5), 22.531(b) and 22.551 from our rules.

#### **c. Additional Channel Policies**

147. *Background.* Sections 22.539 and 22.569 govern the processing of applications for

---

<sup>411</sup> We emphasize that any site-based licensee in these three services that seeks a CIC expansion over land must continue to obtain prior Commission approval. We also note that if a CIC expansion over water requires frequency coordination pursuant to international treaty or agreement, then such an extension would be classified as major under Section 1.929(a)(5) and require prior Commission approval.

<sup>412</sup> Arch Wireless Comments at 5.

<sup>413</sup> 47 C.F.R. § 22.531(b).

<sup>414</sup> 47 C.F.R. § 22.551.

<sup>415</sup> *Notice*, 18 FCC Rcd at 8403 ¶56.

<sup>416</sup> In 1996, the Commission expanded permitted offerings of fixed wireless service by Commercial Mobile Radio Service providers. See Amendment of the Commission's Rules to Permit Flexible Service Offerings in the Commercial Mobile Radio Services, *First Report and Order and Further Notice of Proposed Rule Making*, 11 FCC Rcd 8965 (1996), *Second Report and Order and Order on Reconsideration*, 15 FCC Rcd 14680 (2000).

<sup>417</sup> See 47 C.F.R. §§ 22.501-22.529, §§ 22.201-22.299.

additional paging and mobile channels, respectively.<sup>418</sup> In particular, these rules implement the Commission's general policy to assign only one paging or two mobile channels in an area to a carrier per application cycle.<sup>419</sup> Carriers that seek to add channels to their systems in the same geographic service area may thus do so one at a time (two for mobile channels).<sup>420</sup> Before applying for another channel, carriers must certify that service has commenced on the previously-granted channel(s).<sup>421</sup> We pointed out in the *Notice* that Sections 22.539 and 22.569 were adopted at a time when the Commission assigned the subject paging channels on a site-by-site basis and gave close consideration to the amount of paging spectrum held by a single entity in a particular geographic area, and that our regulatory structure for the licensing of paging channels has changed.<sup>422</sup> We therefore tentatively concluded that Sections 22.539 and 22.569 should be eliminated.<sup>423</sup>

148. *Discussion.* We delete Sections 22.539 and 22.569 from our rules.<sup>424</sup> Today, the Part 22 paging channels set forth in these rule sections are licensed on a geographic area basis rather than assigned on a site-by-site basis.<sup>425</sup> We no longer place a blanket restriction on the amount of spectrum that a single entity may hold in one area (although we review competitive issues involving paging licensees on a case-by-case basis).<sup>426</sup> Incumbents operating on a site-by-site basis may expand their systems by assignment or transfer of a license or by participating in a spectrum auction. In addition, under our current licensing scheme for paging channels, we place no blanket restrictions on the number of overlapping Part 22 paging channels that a particular entity may hold in one area. Consequently, we believe that maintaining these rules is unnecessary.

**d. Provision of Rural Radiotelephone Service on Paging Channels**

149. *Background.* Section 22.563 requires stations in the Paging and Radiotelephone Service that provide two-way public mobile service on certain channels to also provide Rural Radiotelephone Service (RRS) upon request from a subscriber.<sup>427</sup> In the *Notice*, we pointed out that these channels are now predominantly assigned for use by one-way paging systems that are technically incapable of providing RRS.<sup>428</sup> Consequently, we tentatively concluded that Section 22.563 is no longer necessary and

---

<sup>418</sup> 47 C.F.R. §§ 22.539, 22.569.

<sup>419</sup> 47 C.F.R. §§ 22.539, 22.569. Section 22.569 applies to applications proposing to use the channels listed in Section 22.561 (one-way or two-way mobile operations), except applications that propose to use these channels to provide paging service only, which are subject to Section 22.539.

<sup>420</sup> 47 C.F.R. §§ 22.539, 22.569.

<sup>421</sup> 47 C.F.R. §§ 22.539, 22.569.

<sup>422</sup> *Notice*, 18 FCC Rcd at 8403 ¶57.

<sup>423</sup> *Id.*

<sup>424</sup> We note that no comments were filed regarding this issue.

<sup>425</sup> Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems; Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Second Report and Order and Further Notice of Proposed Rule Making*, 12 FCC Rcd 2732 (1997).

<sup>426</sup> See 2000 Biennial Regulatory Review Spectrum Aggregation Limits For Commercial Mobile Radio Services, *Report and Order*, 16 FCC Rcd 22668 (2001).

<sup>427</sup> 47 C.F.R. § 22.563. The channels are in the frequency ranges 152.03-152.81, 157.77-158.67, 454.025-454.650, and 459.025-459.650 MHz.

<sup>428</sup> *Notice*, 18 FCC Rcd at 8404 ¶60.

should be eliminated.<sup>429</sup>

150. *Discussion.* No comments were received on this issue, and we believe that Section 22.563 is no longer needed. Not only are most of these channels assigned for one-way paging use, there are now a number of wireless telephone service alternatives to RRS (e.g., cellular, PCS, and some SMR).<sup>430</sup> Moreover, consumers in many areas—including rural areas—have begun to substitute cellular, PCS, and some SMR service for landline service. This nascent trend is driven in part by wireless service plans that include the price of long distance service that may reduce a consumer's aggregate charges for local and toll service. In light of these circumstances and the fact that rural subscribers may readily obtain fixed basic telephone services from a variety of sources, we delete Section 22.563 from our rules.

**e. Transmission Power Limits**

151. *Background.* Section 22.565(g) limits the effective radiated power (ERP) of dispatch and auxiliary test transmitters to 100 watts.<sup>431</sup> In the *Notice*, we sought comment on whether the 100-watt limit should be revised or eliminated, noting that were we to eliminate the rule, Section 22.565(a) would allow for a 150-watt limit.<sup>432</sup>

152. *Discussion.* We delete Section 22.565(g) so that test transmitters may operate, pursuant to Section 22.565(a), at a limit of 150 watts. Commenters that mention this issue are in favor of this revision.<sup>433</sup> We note that because we have decided to permit auxiliary test transmitters to operate on both base and mobile frequencies,<sup>434</sup> licensees can now choose to operate on either the base or the mobile side of the frequency subject to the 150-watt limit under Section 22.565(a).

**f. Dispatch Service**

153. *Background.* Section 22.577 governs the provision of dispatch service.<sup>435</sup> In the *Notice*, we suggested that the limitations placed on the provision of dispatch service in Section 22.577 may be unduly restrictive, and we therefore sought comment on whether Section 22.577 should be revised or eliminated.<sup>436</sup> This section requires, for example, that service providers notify the Commission every time a dispatch transmitter is installed as well as provide the name and address of subscribers.<sup>437</sup>

154. *Discussion.* We believe that the deletion of Section 22.577 of our rules is warranted.

---

<sup>429</sup> *Id.*

<sup>430</sup> Indeed, FCC rules provide that cellular and PCS licensees may provide fixed services on a co-primary basis. See 47 C.F.R. § 22.901(d) (cellular fixed services); 47 C.F.R. § 24.3 (PCS fixed services).

<sup>431</sup> 47 C.F.R. § 22.565(g).

<sup>432</sup> *Notice*, 18 FCC Rcd at 8405 ¶61. If Section 22.565(g) were eliminated, then the maximum ERP for dispatch and auxiliary test transmitters would be governed by Section 22.565(a). Under that section, fixed stations (such as dispatch and auxiliary test transmitters) operating on mobile frequencies may have a maximum ERP of 150 watts.

<sup>433</sup> See AMTA Comments at 7; NYSE&GC Reply Comments at 12-13.

<sup>434</sup> See *supra* paras. 130-131.

<sup>435</sup> 47 C.F.R. § 22.577.

<sup>436</sup> *Notice*, 18 FCC Rcd at 8405 ¶62. We note that, in 1995, restrictions on cellular dispatch services were eliminated. See Eligibility for the Specialized Mobile Radio Services and Radio Services in the 220-222 MHz Land Mobile Band and Use of Radio Dispatch Communications, *Report and Order*, 10 FCC Rcd 6280, 6297 ¶29 (1995).

<sup>437</sup> 47 C.F.R. § 22.577.

Commenters were unanimous in their support for the removal of dispatch restrictions, stating generally that the rule is outdated and no longer necessary.<sup>438</sup> More specifically, the Joint Commenters believe that “limits on output power and the functionality of the dispatch transmitter” are out of line with the Commission’s emphasis on “flexible spectrum use.”<sup>439</sup> Moreover, the Joint Commenters point out that Part 90 dispatch operations are not subject to such restrictions, and that the removal of Section 22.577 will “expand the choices to wireless end users.”<sup>440</sup> We agree, and therefore delete Section 22.577.<sup>441</sup>

**g. Hawaiian UHF Channels for Point-to-Point Operation**

155. *Background.* Section 22.591 includes a table of channels allocated to fixed transmitters that support other transmitters that provide PMS.<sup>442</sup> This table includes six UHF channel pairs designated for fixed use in the State of Hawaii. In the *Notice*, we noted the very limited usage of these channels in Hawaii and sought comment on possible alternative uses of this spectrum.<sup>443</sup>

156. *Discussion.* No comments were received on this topic. Because we do not believe that the record supports a particular approach in connection with these channels, we will revisit the issue at a later time.

**h. Channels for Point-to-Point Operation—Microwave Channels**

157. *Background.* Section 22.591 also includes a table of 2110-2130 and 2160-2180 MHz microwave channels.<sup>444</sup> In 1992, the Commission allocated these bands for use by emerging technologies (ET) services and no new systems may be authorized on these channels under Part 22.<sup>445</sup> Recently, the Commission allocated, inter alia, the 2110-2130 MHz band for Advanced Wireless Services (AWS).<sup>446</sup> At present, both the 2110-2130 and 2160-2180 MHz bands are widely used for common carrier fixed microwave service.<sup>447</sup> In the *Notice*, we tentatively concluded that these microwave channels should be

<sup>438</sup> See AMTA Comments at 6-7; Blooston Comments at 8-9; Joint Commenters Comments at 5; NYSE&GC Reply Comments at 12-13.

<sup>439</sup> Joint Commenters Comments at 5.

<sup>440</sup> *Id.*

<sup>441</sup> We note that, while we are eliminating Sections 22.577 and 22.565(g) of the rules, operations on the mobile designated frequencies are subject to the power limitations in Section 22.565(a) and the channel assignment criteria in Section 22.567(h) of the rules.

<sup>442</sup> 47 C.F.R. § 22.591.

<sup>443</sup> *Notice*, 18 FCC Rcd at 8405 ¶63.

<sup>444</sup> The Section 22.591 table incorrectly specifies eight microwave channel center frequencies. That table should reflect that there are 398 microwave channel center frequencies. See Revision of Part 22 of the Commission's Rules Governing the Public Mobile Services, *Report and Order*, 9 FCC Rcd 6513, 6632 (1994).

<sup>445</sup> Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, *First Report and Order and Third Notice of Proposed Rule Making*, 7 FCC Rcd 6886, 6890 ¶21 (1992).

<sup>446</sup> Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, *Second Report and Order*, 17 FCC Rcd 23193 (2002); see also Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, including Third Generation Wireless Systems, *Third Report and Order, Third Notice of Proposed Rulemaking, and Second Memorandum Opinion and Order*, 18 FCC Rcd 2223 (2003).

<sup>447</sup> See 47 C.F.R. § 101.101; *Notice*, 18 FCC Rcd at 8405 ¶64.

deleted from the Section 22.591 table and that Section 22.591(b) regarding assignment of such channels should be deleted.<sup>448</sup>

158. In addition, Section 22.601 specifies rules for modification of previously authorized Part 22 stations on the 2110-2130 and 2160-2180 MHz channels.<sup>449</sup> Section 22.602 sets forth rules governing a transition period for Paging and Radiotelephone Service licensees on the microwave channels listed in Section 22.591 to relocate to other frequencies.<sup>450</sup> In the *Notice*, we sought comment on the use of the frequencies under these licenses and whether either of these sections should be revised.<sup>451</sup>

159. *Discussion.* We will take the actions as proposed in the *Notice*. Specifically, we delete the microwave channels from the Section 22.591 table and delete Section 22.591(b) regarding the assignment of such channels. None of the entities licensed on the subject microwave frequencies submitted comments in this proceeding, and no other commenter mentions this issue. Thus, we will allow the licenses to expire at the end of their current authorizations, and we will not renew them for another license term. These microwave incumbents will, in the meantime, continue to be subject to Sections 22.601 and 22.602 (although once their license terms end, these sections will become superfluous). As discussed in the *Notice*, we will delete the cross-reference to Section 22.591 in Sections 22.601 and 22.602 and, instead, reference the 2110-2130 and 2160-2180 MHz channels.

#### i. Effective Radiated Power Limits

160. *Background.* Section 22.593 specifies power limits for the channels enumerated in Section 22.591.<sup>452</sup>

161. *Discussion.* Although we are deleting the microwave channels listed in Section 22.591, these microwave licensees are still subject to Section 22.593, which specifies the EIRP of the microwave channels listed in Section 22.591.<sup>453</sup> Consequently, we will not amend this rule until after the subject licenses have expired.

#### j. Channel Usage Reports

162. *Background.* Section 22.655 requires a subcategory of paging licensees—470-512 MHz band licensees—to submit defined channel usage reports every three months.<sup>454</sup> In the *Notice*, we pointed out that only two carriers must still file these reports, that they have maintained mobile usage of the channels for some time, and that loading reporting requirements for other paging operators have been

---

<sup>448</sup> *Notice*, 18 FCC Rcd at 8406 ¶64.

<sup>449</sup> 47 C.F.R. § 22.601.

<sup>450</sup> 47 C.F.R. § 22.602.

<sup>451</sup> *Notice*, 18 FCC Rcd at 8406-07 ¶¶64-66.

<sup>452</sup> 47 C.F.R. § 22.593.

<sup>453</sup> *Id.*

<sup>454</sup> 47 C.F.R. § 22.655. As explained by the rule itself, the reporting requirement was adopted as part of the Commission's redesignation of the public mobile channels in the 470-512 MHz band from trunked mobile operation to point-to-multipoint operation as the demand for trunked mobile service decreased. Only licensees in this band providing trunked mobile service are required to submit reports, based on the premise that the reports would enable the Commission to have the information necessary to know when it may redesignate the channels to point-to-multipoint operation. Only this category of PMS licensees must file channel usage reports.



eliminated.<sup>455</sup> We sought comment on the concerns of the Association of Public-Safety Communications Officials-International, Inc. (APCO), expressed in the 2002 Biennial Review Proceeding (WT Docket No. 02-310),<sup>456</sup> regarding the loss of these reports, but we nonetheless tentatively concluded that we should eliminate Section 22.655.<sup>457</sup>

163. *Discussion.* We will amend Section 22.655 so that it no longer requires licensees engaged in trunked mobile operations to measure and report channel usage. In this connection, we agree with the lone commenter on this topic that the continuation of this reporting requirement is burdensome and no longer necessary.<sup>458</sup> Moreover, there are only two licensees that currently remain subject to this requirement, while the majority of CMRS licensees using the 470-512 MHz band do not have to submit these quarterly reports. Given these circumstances, we do not believe that the continued channel usage reporting requirements are warranted.

164. In the *Notice*, we specifically requested comment on APCO's concerns regarding the "continuing value" of the channel usage reports.<sup>459</sup> No comments were received in the instant proceeding, however, that contradict our findings regarding the usefulness of these reports.

#### **6. Rural Radiotelephone Service Rules—Channels for Basic Exchange Telephone Radio Systems**

165. *Background.* Section 22.757 specifies channels (in addition to those listed in Section 22.725) in the frequency ranges 816.0125-820.2375 MHz and 861.0125-865.2375 MHz that are allocated for paired assignment to basic exchange telephone radio systems (BETRS).<sup>460</sup> In the *Notice*, we pointed out that the Commission auctioned these channels on a geographic area basis in Auction 16, and that they are no longer available for assignment to BETRS.<sup>461</sup> We therefore tentatively concluded that Section 22.757 should be eliminated and that the first sentence of Section 22.725 should be amended to provide that the channels listed therein are available for paired assignment to BETRS.<sup>462</sup>

166. *Discussion.* We amend Sections 22.757 and 22.725 as proposed in the *Notice*. Because the channels listed in these sections are no longer available for assignment to BETRS, these rules are outdated. No comments were received regarding this topic.

#### **7. Offshore Radiotelephone Service Rules**

167. *Background.* Subpart I of Part 22—which includes Sections 22.1001, 22.1003, 22.1005, 22.1007, 22.1009, 22.1011, 22.1013, 22.1015, 22.1025, 22.1031, 22.1035, and 22.1037—governs the

---

<sup>455</sup> *Notice*, 18 FCC Rcd at 8407 ¶¶68-70.

<sup>456</sup> See Reply Comments of APCO, WT Dkt. No. 02-310, at 3 (filed Nov. 4, 2002). In that proceeding, APCO questioned Westel's proposal to eliminate the requirements that Part 22 licensees report channel usage in the 470-512 MHz band, stating that the reports are necessary to determine whether spectrum in the 470-512 MHz band is underutilized and could be made available for other uses.

<sup>457</sup> *Notice*, 18 FCC Rcd at 8407 ¶70.

<sup>458</sup> Westel Comments at 3-4.

<sup>459</sup> *Notice*, 18 FCC Rcd at 8407 ¶70.

<sup>460</sup> 47 C.F.R. § 22.757.

<sup>461</sup> *Notice*, 18 FCC Rcd at 8408 ¶71.

<sup>462</sup> *Id.*

licensing and operation of Offshore Radiotelephone Service (ORS) stations. These stations provide telephone service to subscribers located on oil exploration and production platforms in the Gulf of Mexico. In the *Notice*, we stated that, to date, we have received no requests for revising the rules governing ORS to provide increased flexibility.<sup>463</sup> We nonetheless requested comment as to whether any of the Subpart I rules warrant review as a result of meaningful economic competition among providers of wireless services, or on any other basis.<sup>464</sup> We also proposed to revise Section 22.1003,<sup>465</sup> to revise the eligibility requirements to eliminate references to "common carriers" and instead to rely on language similar to that used in Parts 24 and 27 ("[a]ny entity, other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. 310, . . . is eligible to hold a license under this part").

168. *Discussion.* No comments were received in connection with this Subpart in response to the *Notice*. Therefore, at this time, we take no action on the majority of the rules in this Subpart, and we will revisit the ORS rules at another time. We do, however, remove the reference to "common carriers" in Section 22.1003 in order to maintain consistency among the Part 22 Public Mobile Services.<sup>466</sup>

### III. NOTICE OF PROPOSED RULEMAKING – COMPETITIVE BIDDING

169. If mutually exclusive applications are filed for the commercial air-ground licenses that comprise the three band configurations defined in the Report and Order, the Commission will be required to resolve such applications by competitive bidding pursuant to the requirements of Section 309(j) of the Communications Act.<sup>467</sup> Similarly, the Commission is required to resolve by competitive bidding mutually exclusive general aviation air-ground applications.<sup>468</sup> To date, the Commission has accepted for filing nine groups of mutually exclusive general aviation applications, which are currently pending. Therefore, the Wireless Telecommunications Bureau ("WTB") will, pursuant to its delegated authority, schedule an auction to resolve these applications.<sup>469</sup> Accordingly, in this Notice of Proposed Rulemaking, we request comment on a number of issues relating to competitive bidding procedures for both commercial air-ground and general aviation licenses.

#### A. Incorporation by Reference of the Part 1 Standardized Auction Rules

170. We propose to conduct auctions of both commercial and general aviation air-ground

---

<sup>463</sup> *Notice*, 18 FCC Rcd at 8409 ¶77.

<sup>464</sup> *Id.*

<sup>465</sup> 47 C.F.R. § 22.1003.

<sup>466</sup> *See supra* paras. 99-103.

<sup>467</sup> 47 U.S.C. § 309(j).

<sup>468</sup> The Balanced Budget Act of 1997, Pub. L. No. 105-33, Title III, 111 Stat. 251 (1997), amended Section 309(j) to require the Commission to award mutually exclusive applications for initial licenses or permits using competitive bidding procedures, with very limited exceptions. These exceptions are licenses and construction permits for public safety radio services, digital television service licenses and permits given to existing terrestrial broadcast licensees to replace their analog television service licenses, and licenses and construction permits for noncommercial educational broadcast stations and public broadcast stations under 47 U.S.C. § 397(6). *See* 47 U.S.C. §§ 309(j)(1) & (2).

<sup>469</sup> This auction will be limited to the parties in each of the nine groups of applicants that have filed mutually exclusive applications, which constitute closed filing groups. *See* 47 C.F.R. § 22.131. These parties will be required to file short-form applications (FCC Form 175) and submit upfront payments to participate in the auction. *See* 47 C.F.R. §§ 1.2105(a) & (b), 1.2106.

licenses in conformity with the general competitive bidding rules set forth in Part 1, Subpart Q, of the Commission's Rules, and substantially consistent with the bidding procedures that have been employed in previous Commission auctions.<sup>470</sup> Specifically, we propose to employ the Part 1 rules governing, among other things, designated entities, application and payment procedures, collusion issues, and unjust enrichment. Under this proposal, such rules would be subject to any modifications that the Commission may adopt in its Part 1 Competitive Bidding proceeding. In addition, consistent with current practice, matters such as the appropriate competitive bidding design, as well as minimum opening bids and reserve prices, would be determined by WTB pursuant to its delegated authority.<sup>471</sup> We seek comment on this proposal. In particular, we request comment on whether any of our Part 1 competitive bidding rules would be inappropriate, or should be modified, for auctions of either commercial or general aviation air-ground licenses.

171. With respect to the commercial air-ground licenses we are making available, we are providing applicants with the opportunity to bid on licenses constituting different band configurations. Accordingly, the determination of whether individual commercial air-ground license applications are mutually exclusive for purposes of Section 309(j) will be based on whether different applicants have applied for licenses in different band plan license configurations as well as on whether different applicants have applied for the same licenses. In other words, because only one band configuration will be implemented, applicants that apply for licenses in different configurations will be considered to have filed mutually exclusive applications. We tentatively conclude, however, that this and any other differences from our past auctions do not necessitate any changes to our Part 1 competitive bidding rules, and that WTB can address such differences through its standard practice of seeking comment on and adopting procedures for specific auctions. We seek comment on this tentative conclusion.

#### **B. Provisions for Designated Entities**

172. In authorizing the Commission to use competitive bidding, Congress mandated that the Commission "ensure that small businesses, rural telephone companies, and businesses owned by members of minority groups and women are given the opportunity to participate in the provision of spectrum-based services."<sup>472</sup> In addition, Section 309(j)(3)(B) of the Communications Act requires that in establishing eligibility criteria and bidding methodologies, the Commission promote "economic opportunity and competition . . . by avoiding excessive concentration of licenses and by disseminating licenses among a wide variety of applicants, including small businesses, rural telephone companies, and businesses owned by members of minority groups and women."<sup>473</sup> One of the principal means by which the Commission furthers these statutory goals is the award of bidding credits to small businesses. The Commission

<sup>470</sup> See 47 C.F.R. §§ 1.2101-1.2113.

<sup>471</sup> See Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures, Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, 4660-4685 MHz, *Third Report and Order and Second Further Notice of Proposed Rule Making*, 13 FCC Rcd 374, 448 ¶¶124-125 (1997) ("Part 1 Third R&O") (directing WTB to seek comment on specific mechanisms related to day-to-day auction conduct such as the structure of bidding rounds and stages, establishment of minimum opening bids or reserve prices, minimum accepted bids, activity requirements for each stage of the auction, and stopping rules); Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures, *Order, Memorandum Opinion and Order and Notice of Proposed Rule Making*, 12 FCC Rcd 5686, 5697 ¶16 (1997) (clarifying that, pursuant to Section 0.131 of the Commission's Rules, 47 C.F.R. § 0.131, the Chief, Wireless Telecommunications Bureau, has delegated authority to implement all of the Commission's rules pertaining to auctions procedures).

<sup>472</sup> See 47 U.S.C. § 309(j)(4)(D). Such entities are collectively described as "designated entities." See 47 C.F.R. § 1.2110(a).

<sup>473</sup> 47 U.S.C. § 309(j)(3)(B).

defines eligibility requirements for small business bidding credits on a service-specific basis, taking into account the capital requirements and other characteristics of the particular service.<sup>474</sup>

173. In considering small business bidding credits for the commercial air-ground licenses we make available in today's Report and Order, we note that in the past the Commission has declined to adopt provisions for designated entities for certain services, such as the direct broadcast satellite service and the digital audio radio service, which have extremely high implementation costs.<sup>475</sup> The Commission reached this conclusion in those instances in large part because it was unclear whether small businesses could attract the capital necessary to implement and provide a nationwide service.<sup>476</sup> We also note that in previous auctions of nationwide licenses in which the Commission offered bidding credits to designated entities, none of the licenses was won by a designated entity.<sup>477</sup> Moreover, the legislative history of the designated entity provisions of Section 309(j) demonstrates that Congress did not necessarily intend that the Commission adopt special measures for designated entities in nationwide services. The House Report to the Omnibus Budget Reconciliation Act of 1993 states that "[t]he characteristics of some services are inherently national in scope, and are therefore ill-suited for small businesses."<sup>478</sup>

174. Notwithstanding these facts, we tentatively conclude that small business bidding credits are appropriate for the commercial air-ground service. We base this conclusion on the fact that no commercial air-ground license will authorize the use of as much spectrum as other nationwide services for which the Commission has declined to adopt small business bidding credits. In addition, we believe that the operation of a commercial air-ground service may require lower capital expenditures than other nationwide services, such as satellite services, because the necessary infrastructure may be less costly.<sup>479</sup> Thus, we tentatively conclude that small businesses may be able to attract the necessary capital to provide commercial air-ground service, particularly if they are assisted by bidding credits.<sup>480</sup> We seek comment

<sup>474</sup> 47 C.F.R. § 1.2110(c)(1); *see also Part 1 Third R&O*, 13 FCC Rcd at 388 ¶18; Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Second Memorandum Opinion and Order*, 9 FCC Rcd 7245, 7269 ¶145 (1994).

<sup>475</sup> *See Revision of Rules and Policies for the Direct Broadcast Satellite Service, Report and Order*, 11 FCC Rcd 9712 (1995) (“*DBS Auction Order*”); Establishment of Rules and Policies for the Digital Audio Radio Satellite Service in the 2310-2360 MHz Band, *Report and Order, Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 12 FCC Rcd 5754 (1997) (“*DARS Auction Order*”).

<sup>476</sup> *See DBS Auction Order*, 11 FCC Rcd at 9799 ¶217; *DARS Auction Order*, 12 FCC Rcd at 5824-25 ¶¶174-76.

<sup>477</sup> *See Announcing the High Bidders in the Auction of Ten Nationwide Narrowband PCS Licenses, Public Notice*, PNWL 94-4 (rel. Aug. 2, 1994). In the nationwide narrowband PCS auction (Auction No. 1), bidding credits on ten nationwide licenses were offered to women- and minority-owned businesses. *See also 1670-1675 MHz Band Auction Closes, Winning Bidder Announced, Public Notice*, 18 FCC Rcd 9089 (2003). In the 1670-1675 MHz Band auction (Auction No. 46), the Commission offered a bidding credit on a nationwide license in the 1670-1675 MHz band to small businesses with average annual revenues not exceeding \$40 million and very small businesses with average annual revenues not exceeding \$15 million.

<sup>478</sup> H.R. Rep. No.103-111, at 254 (1993).

<sup>479</sup> Air-ground service may also require fewer ground (base) stations than other terrestrial services that are provided on a nationwide basis, such as broadband PCS.

<sup>480</sup> In *ex parte* comments, AirCell and Space Data urge the Commission to adopt small business bidding credits for commercial air-ground licenses, arguing that they are small businesses that have the resources and expertise to provide air-ground service but may not be able to compete for a license without bidding credits. Letter from Michele C. Farquhar, Counsel to AirCell, Inc., to Marlene H. Dortch, Secretary, Federal Communications Commission, dated Sept. 17, 2004 (AirCell Sept. 17 *Ex parte* letter); Letter from Jerry Knoblach, CEO, Space Data (continued....)

on these tentative conclusions.

175. Having tentatively concluded that small businesses may be able to provide commercial air-ground service, we nonetheless recognize that such operations may be very capital-intensive relative to other services provided to smaller geographic areas. We therefore propose to use the same small business definitions we have adopted for other capital-intensive services that serve large geographic areas. Specifically, we propose to define a small business as an entity with average annual gross revenues for the three preceding years not exceeding \$40 million, and to define a very small business as an entity with average annual gross revenues for the three preceding years not exceeding \$15 million.<sup>481</sup> We also propose a 15 percent bidding credit for small businesses and a 25 percent bidding credit for very small businesses, as set forth in our standardized schedule at 47 C.F.R. § 1.2110(f)(2). These are the same tiered small business definitions and bidding credits that we adopted, for example, for EAG-based licenses in the upper and lower 700 MHz bands.<sup>482</sup> We note also that AirCell and Space Data, in *ex parte* comments, support these small business definitions and bidding credits as appropriate for commercial air-ground service.<sup>483</sup>

176. We request comment on these proposals. In particular, we invite commenters to discuss the expected capital requirements and other characteristics of the commercial air-ground operations that may be provided using the licenses made available by today's Report and Order, and the relationship of such requirements and characteristics to small business definitions and bidding credits. We invite commenters to provide comparisons with other services for which the Commission has established bidding credits. To the extent commenters support a different bidding credit regime than the one proposed here, they should support their proposals with relevant information. Such comments should provide information on, for example, the technology that a commercial air-ground licensee is likely to employ, the cost of deployment, and other factors that may affect capital requirements for commercial air-ground operations.

177. We also seek comment on whether our proposed designated entity provisions, if applied to the commercial air-ground service, would promote participation by businesses owned by minorities and by women, as well as participation by rural telephone companies. To the extent that commenters propose additional provisions to enhance participation by minority-owned or women-owned businesses, commenters should address how we should craft such provisions to meet the relevant standards of judicial review.<sup>484</sup>

178. In contrast to the commercial air-ground licenses made available by today's Report and Order, general aviation air-ground licenses are specialized licenses that are generally valued by relatively small businesses. For this reason, we expect that small businesses interested in acquiring these

(Continued from previous page)

Corporation, to Marlene H. Dortch, Secretary, Federal Communications Commission, dated Oct. 28, 2004 (Space Data Oct. 28 *Ex parte* letter).

<sup>481</sup> We are coordinating these size standards with the U.S. Small Business Administration.

<sup>482</sup> See Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), *Report and Order*, 17 FCC Rcd 2153 (2002); Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions of Part 27 of the Commission's Rules, *First Report and Order*, 15 FCC Rcd 25495 (2000). The country is divided into six Economic Area Groupings (EAGs); thus, EAGs are very large geographic areas.

<sup>483</sup> AirCell Sept. 17 *Ex parte* letter, at 2; Space Data Oct. 28 *Ex parte* letter, at 2-3. AirCell and Space Data also suggest that the Commission consider higher bidding credits. However, neither company makes a specific proposal or supplies specific facts to support such a proposal.

<sup>484</sup> See *United States v. Virginia*, 518 U.S. 515 (1996); *Adarand Constructors v. Peña*, 515 U.S. 200 (1995).

licenses are unlikely to have difficulty obtaining the capital needed to participate in an auction.<sup>485</sup> We seek comment on whether small business bidding credits would be appropriate for the general aviation air-ground service.

#### IV. PROCEDURAL MATTERS

##### A. Comment Filing Procedures

179. Pursuant to Sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments and reply comments on the *Notice of Proposed Rulemaking*, WT Docket No. 05-42, on or before 20 and 30 days after publication in the Federal Register, respectively. Comments may be filed using: (1) the Commission's Electronic Comment Filing System (ECFS), (2) the Federal Government's eRulemaking Portal, or (3) by filing paper copies. See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

- *Electronic Filers:* Comments may be filed electronically using the Internet by accessing the ECFS: <http://www.fcc.gov/cgb/ecfs/> or the Federal eRulemaking Portal: <http://www.regulations.gov>. Filers should follow the instructions provided on the website for submitting comments.
  - For ECFS filers, if multiple docket or rulemaking numbers appear in the caption of this proceeding, filers must transmit one electronic copy of the comments for each docket or rulemaking number referenced in the caption. In completing the transmittal screen, filers should include their full name, U.S. Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To get filing instructions, filers should send an e-mail to [ecfs@fcc.gov](mailto:ecfs@fcc.gov), and include the following words in the body of the message, "get form." A sample form and directions will be sent in response.
- *Paper Filers:* Parties who choose to file by paper must file an original and four copies of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.

Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail (although we continue to experience delays in receiving U.S. Postal Service mail). All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.

- The Commission's contractor will receive hand-delivered or messenger-delivered paper filings for the Commission's Secretary at 236 Massachusetts Avenue, NE., Suite 110, Washington, DC 20002. The filing hours at this location are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes must be disposed of before entering the building.

---

<sup>485</sup> We note that the Commission did not adopt small business bidding credits for cellular unserved area authorizations, which it found were valued primarily by a discrete group of small businesses. See *Implementation of Section 309(j) of the Communications Act – Competitive Bidding*, *Ninth Report and Order*, 11 FCC Rcd 14769, 14791 ¶45 (1996).

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail should be addressed to 445 12<sup>th</sup> Street, SW, Washington DC 20554.

*People with Disabilities:* Contact the FCC to request materials in accessible formats (braille, large print, electronic files, audio format, etc.) by e-mail at [FCC504@fcc.gov](mailto:FCC504@fcc.gov) or call the Consumer & Governmental Affairs Bureau at 202-418-0531 (voice), 202-418-7365 (TTY).

**B. *Ex parte* Rules —Permit-But-Disclose**

180. This is a permit-but-disclose notice and comment rulemaking proceeding. *Ex parte* presentations are permitted, except during the Sunshine Agenda period, provided they are disclosed pursuant to the Commission's rules.<sup>486</sup>

**C. Congressional Review Act**

181. The Commission will send a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act, see 5 U.S.C. 801(a)(1)(A).

**D. Final Regulatory Flexibility Analysis**

182. Pursuant to the Regulatory Flexibility Act,<sup>487</sup> the Final Regulatory Flexibility Analysis (FRFA) for the Report and Order is set forth in Appendix C. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of the Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the Regulatory Flexibility Act.

**E. Initial Regulatory Flexibility Analysis**

183. As required by the Regulatory Flexibility Act,<sup>488</sup> the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities of the proposals addressed in the *Notice of Proposed Rulemaking*. The IRFA is set forth in Appendix D. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines for comments on the *Notice of Proposed Rulemaking*, and they should have a separate and distinct heading designating them as responses to the IRFA. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of the *Notice of Proposed Rulemaking*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the Regulatory Flexibility Act.<sup>489</sup>

<sup>486</sup> See generally 47 C.F.R. §§ 1.1202, 1.1203, 1.1206.

<sup>487</sup> See 5 U.S.C. § 604.

<sup>488</sup> See 5 U.S.C. § 603.

<sup>489</sup> See 5 U.S.C. § 603(a).

**F. Paperwork Reduction Act of 1995**

184. The Report and Order contains either new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we previously sought specific comment on how the Commission might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

185. In this present document, we have assessed the effects of our decisions to (1) require applicants for commercial Air-Ground Radiotelephone Service authorizations to file Form 175 and to require auction winners to file Form 601; and (2) require applicants for general aviation Air-Ground Radiotelephone Service authorizations to file Form 175 and to require auction winners to file Form 601. We find that these actions may potentially increase the information collection requirements for businesses with fewer than 25 employees that, respectively, decide to seek authorizations in the commercial Air-Ground Radiotelephone Service or have already filed for or may in the future file for a general aviation Air-Ground Radiotelephone Service authorization. Such information collection is necessary to allow the Commission to ensure an applicant is qualified and to process its application, where appropriate, to a grant.

186. The Notice of Proposed Rulemaking contains proposed new or modified information collection requirements. The Commission, as part of its continuing effort to reduce paperwork burdens, invites the general public and the Office of Management and Budget (OMB) to comment on the information collection requirements contained in this document, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. Public and agency comments are due 20 days after publication in the Federal Register. Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of information technology. In addition, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, see 44 U.S.C. 3506(c)(4), we seek specific comment on how we might "further reduce the information collection burden for small business concerns with fewer than 25 employees."

**G. Contact Information**

187. The primary Wireless Telecommunications Bureau contact for this proceeding is Richard Arsenault, Chief Counsel of the Wireless Telecommunications Bureau Mobility Division (202-418-0920, Richard.Arsenault@fcc.gov). For auctions-related issues, contact Lynne Milne (202-418-7055, Lynne.Milne@fcc.gov). Press inquiries should be directed to Lauren Patrich, Wireless Telecommunications Bureau, at (202) 418-7944, TTY at (202) 418-7233, or e-mail at Lauren.Patrich@fcc.gov.

**V. ORDERING CLAUSES**

188. Accordingly, IT IS ORDERED THAT, pursuant to the authority contained in Sections 1, 4(i), 11, 303(r) and (y), 308, 309, and 332 of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 161, 303(r), 303(y), 308, 309, and 332, this REPORT AND ORDER AND NOTICE OF PROPOSED RULEMAKING is hereby ADOPTED, and Parts 1, 22, and 90 of the Commission's rules

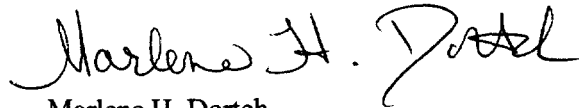


are amended accordingly.

189. IT IS FURTHER ORDERED that, pursuant to Sections 4(i), 301, and 307 of the Communications Act, as amended, 47 U.S.C. §§ 154(i), 301, and 307, a new license for Station KNKG804, BE GRANTED to Verizon Airfone Inc. for a five-year non-renewable term in accordance with the terms and conditions set forth above (file no. 0001716212).<sup>490</sup>

190. IT IS FURTHER ORDERED THAT the Commission's Consumer Information Bureau, Reference Information Center, SHALL SEND a copy of this REPORT AND ORDER AND NOTICE OF PROPOSED RULEMAKING, including the Final Regulatory Flexibility Analysis and the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION



Marlene H. Dortch  
Secretary

---

<sup>490</sup> See *supra* paras. 79-82.

**APPENDIX A**  
**COMMENTING PARTIES**  
**(WT Docket No. 03-103)**

**A. Comments**

AirCell, Inc. (AirCell)  
Able Communications Ltd. (Able Communications)  
American Mobile Telecommunications Association, Inc. (AMTA)  
Arch Wireless Operating Company, Inc., the Allied National Paging Association, the American Association of Paging Carriers, Metrocall Holdings Inc., and Weblink Wireless I, L.P.  
(collectively, Arch Wireless)  
Blooston, Mordkofsky, Dickens, Duffy & Prendergast (Blooston)  
Cingular Wireless LLC (Cingular Wireless)  
Joint Comments of Emergency Radio Service, Inc., Saia Communications, Inc., and Texas License Consultants (collectively, Joint Commenters)  
Matt Edwards (Edwards)  
Motorola, Inc. (Motorola)  
QUALCOMM Incorporated (QUALCOMM)  
SkyTel Corp. (SkyTel)  
Societe Internationale de Telecommunications Aeronautiques (SITA)  
Tony Drake (Drake)  
Verizon Airfone  
Verizon Wireless  
Westel Communications, Inc. (Westel)

**B. Reply Comments**

Able Communications Ltd.  
AirCell, Inc.  
Blooston, Mordkofsky, Dickens, Duffy & Prendergast  
The Boeing Company (Boeing)  
New York State Electric & Gas Corporation (NYSE&GC)  
QUALCOMM Incorporated  
SkyTel Corp.  
Societe Internationale de Telecommunications Aeronautiques  
Space Data Corporation (Space Data)  
Stratophone LLC (Stratophone)  
Texas License Consultants (TLC)  
Verizon Airfone  
Verizon Wireless

**C. *Ex partes***

Air Carrier Association of America  
AirCell, Inc.  
AirTran Airways  
American Airlines  
American Association of Paging Carriers (AAPC)

Association of American Railroads  
Association of Public Safety Communications Officials–International, Inc. (APCO)  
Blooston, Mordkofsky, Dickens, Duffy & Prendergast  
The Boeing Company  
Cellular Telecommunications & Internet Association–The Wireless Association (CTIA)  
The Honorable Conrad Burns, Deputy Whip, United States Senate  
Continental Airlines, Inc.  
Federal Bureau of Investigation and U.S. Drug Enforcement Administration (FBI/DEA)  
Flarion Technologies Inc. (Flarion)  
The Honorable Fred Upton, Chairman, House Energy and Commerce Subcommittee on  
Telecommunications and the Internet  
Frontier Airlines, Inc.  
JetBlue Airways  
Metrocall Holdings, Inc. (Metrocall)  
Motorola, Inc.  
National Telecommunications and Information Administration (NTIA)  
Nextel Communications, Inc. (Nextel)  
Northwest Airlines, Inc.  
QUALCOMM Incorporated  
Skyway Aircraft, Inc. (Skyway)  
Space Data Corporation  
Sprint Corporation  
T-Mobile USA  
United Airlines  
U.S. Department of Homeland Security, Immigrations and Customs Enforcement, Federal Air Marshal  
Service  
Verizon Airfone

## APPENDIX B

## FINAL RULES

**Title 47, Part 1 of the Code of Federal Regulations, 47 CFR Part 1, is amended as follows:**

1. The authority citation for Part 1 continues to read as follows:

Authority: 47 U.S.C. 151, 154(i), 154(j), 155, 225, 303(r), 309 and 325(e).

2. In Section 1.903, revise paragraph (c) to read as follows:

**§ 1.903 Authorization required.**

\* \* \* \* \*

(c) *Subscribers.* Authority for subscribers to operate mobile or fixed stations in the Wireless Radio Services, except for certain stations in the Rural Radiotelephone Service, is included in the authorization held by the licensee providing service to them. Subscribers are not required to apply for, and the Commission does not accept, applications from subscribers for individual mobile or fixed station authorizations in the Wireless Radio Services. Individual authorizations are required to operate rural subscriber stations in the Rural Radiotelephone Service, except as provided in § 22.703 of this chapter. Individual authorizations are required for end users of certain Specialized Mobile Radio Systems as provided in § 90.655 of this chapter. In addition, certain ships and aircraft are required to be individually licensed under Parts 80 and 87 of this chapter. See §§ 80.13, 87.18 of this chapter.

3. In Section 1.929, revise paragraph (c)(1) to read as follows:

**§ 1.929 Classification of filings as major or minor.**

\* \* \* \* \*

(c) \* \* \*

(1) In the Paging and Radiotelephone Service, Rural Radiotelephone Service and 800 MHz Specialized Mobile Radio Service (SMR), any change that would increase or expand the applicant's existing composite interference contour, except extensions of a composite interference contour over bodies of water that extend beyond county boundaries (*i.e.*, including but not limited to oceans, the Gulf of Mexico, and the Great Lakes) on a secondary basis.

\* \* \* \* \*

4. Add a new Section 1.958 to read as follows:

**§ 1.958 Distance computation.**

The method given in this section must be used to compute the distance between any two locations, except that, for computation of distance involving stations in Canada and Mexico, methods for distance computation specified in the applicable international agreement, if any, must be used instead. The result of a distance calculation under Parts 21 and 101 of this chapter must be rounded to the nearest tenth of a kilometer. The method set forth in this paragraph is considered to be sufficiently accurate for distances not exceeding 475 km (295 miles).

(a) Convert the latitudes and longitudes of each reference point from degree-minute-second format to degree-decimal format by dividing minutes by 60 and seconds by 3600, then adding the results to degrees.

$$LATX_{dd} = DD + \frac{MM}{60} + \frac{SS}{3600}$$

$$LONX_{dd} = DDD + \frac{MM}{60} + \frac{SS}{3600}$$

(b) Calculate the mean geodetic latitude between the two reference points by averaging the two latitudes:

$$ML = \frac{LAT1_{dd} + LAT2_{dd}}{2}$$

(c) Calculate the number of kilometers per degree latitude difference for the mean geodetic latitude calculated in paragraph (b) of this section as follows:

$$KPD_{lat} = 111.13209 - 0.56605 \cos 2ML + 0.00120 \cos 4ML$$

(d) Calculate the number of kilometers per degree of longitude difference for the mean geodetic latitude calculated in paragraph (b) of this section as follows:

$$KPD_{lon} = 111.41513 \cos 5ML - 0.09455 \cos 3ML + 0.00012 \cos 5ML$$

(e) Calculate the North-South distance in kilometers as follows:

$$NS = KPD_{lat} \times (LAT1_{dd} - LAT2_{dd})$$

(f) Calculate the East-West distance in kilometers as follows:

$$EW = KPD_{lon} \times (LON1_{dd} - LON2_{dd})$$

(g) Calculate the distance between the locations by taking the square root of the sum of the squares of the East-West and North-South distances:

$$DIST = \sqrt{NS^2 + EW^2}$$

(h) Terms used in this section are defined as follows:

- (1)  $LAT1_{dd}$  and  $LON1_{dd}$  are the coordinates of the first location in degree-decimal format.
- (2)  $LAT2_{dd}$  and  $LON2_{dd}$  are the coordinates of the second location in degree-decimal format.
- (3)  $ML$  is the mean geodetic latitude in degree-decimal format.
- (4)  $KPD_{lat}$  is the number of kilometers per degree of latitude at a given mean geodetic latitude.
- (5)  $KPD_{lon}$  is the number of kilometers per degree of longitude at a given mean geodetic latitude.
- (6)  $NS$  is the North-South distance in kilometers.
- (7)  $EW$  is the East-West distance in kilometers.
- (8)  $DIST$  is the distance between the two locations, in kilometers.

5. Add new Section 1.959 to read as follows:

**§ 1.959 Computation of average terrain elevation.**

Except as otherwise specified in § 90.309(a)(4) of this chapter, average terrain elevation must be calculated by computer using elevations from a 30 second point or better topographic data file. The file must be identified. If a 30 second point data file is used, the elevation data must be processed for intermediate points using interpolation techniques; otherwise, the nearest point may be used. In cases of dispute, average terrain elevation determinations can also be done manually, if the results differ significantly from the computer derived averages.

(a) Radial average terrain elevation is calculated as the average of the elevation along a straight line path from 3 to 16 kilometers (2 and 10 miles) extending radially from the antenna site. If a portion of the radial path extends over foreign territory or water, such portion must not be included in the computation of average elevation unless the radial path again passes over United States land between 16 and 134 kilometers (10 and 83 miles) away from the station. At least 50 evenly spaced data points for each radial should be used in the computation.

(b) Average terrain elevation is the average of the eight radial average terrain elevations (for the eight cardinal radials).

(c) For locations in Dade and Broward Counties, Florida, the method prescribed above may be used or average terrain elevation may be assumed to be 3 meters (10 feet).

6. In the table in Section 1.1102, remove row entry 16.h. "Air Ground Individual".
7. In Section 1.2003, remove the phrase "FCC 409 Airborne Mobile Radio Telephone License Application;".

Title 47, Part 22 of the Code of Federal Regulations, 47 CFR Part 22, is amended as follows:

8. The authority citation for Part 22 continues to read as follows:

Authority: 47 U.S.C. 154, 222, 303, 309 and 332.

9. Revise paragraph (b) of Section 22.1, to read as follows:

**§ 22.1 Basis and purpose.**

\* \* \* \* \*

(b) *Purpose.* The purpose of these rules is to establish the requirements and conditions under which radio stations may be licensed and used in the Public Mobile Services.

10. In Section 22.3, revise the text of paragraph (b) and remove paragraphs (b)(1) and (b)(2), to read as follows:

**§ 22.3 Authorization required.**

\* \* \* \* \*

(b) Authority for subscribers to operate mobile or fixed stations in the Public Mobile Services, except for certain stations in the Rural Radiotelephone Service, is included in the authorization held by the licensee providing service to them. Subscribers are not required to apply for, and the FCC does not accept applications from subscribers for, individual mobile or fixed station authorizations in the Public Mobile Services, except that individual authorizations are required to operate rural subscriber stations in the Rural Radiotelephone Service under certain circumstances. See § 22.703.

11. Revise Section 22.7 in its entirety to read as follows:

**§ 22.7 General eligibility.**

Any entity, other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. 310, is eligible to hold a license under this part. Applications are granted only if the applicant is legally, financially, technically and otherwise qualified to render the proposed service.

12. In Section 22.99, remove the terms "Meteor burst propagation mode", "Radio Common Carrier", and Wireline Common Carrier" and their definitions.

13. In Section 22.99, in the definition of the term "Channel", remove the words "See, for example, § 22.161."

14. In Section 22.99, in the definitions of the terms "Air-Ground Radiotelephone Service", "Cellular Radiotelephone Service", "Offshore Radiotelephone Service", "Public Mobile Services", and "Rural Radiotelephone Service", remove the words "common carrier" and add, in their place, the word "licensee".
15. In Section 22.99, correct "Air-ground Radiotelephone Service" to read "Air-Ground Radiotelephone Service" in the definitions of "Communications channel", "Control channel", and "Ground station".
16. Revise paragraph (d)(4) of Section 22.143 to read as follows:

**§ 22.143 Construction prior to grant of application.**

\* \* \* \* \*

(d) \* \* \*

(4) For any construction or alteration that would exceed the requirements of § 17.7 of this chapter, the licensee has notified the appropriate Regional Office of the Federal Aviation Administration (FAA Form 7460-1), filed a request for antenna height clearance and obstruction marking and lighting specifications (FCC Form 854) with the FCC at WTB, Spectrum Management Resources and Technologies Division, 1270 Fairfield Road, Gettysburg, PA 17325, or electronically via the FCC Antenna Structure Registration home page, [wireless.fcc.gov/antenna/](http://wireless.fcc.gov/antenna/).

\* \* \* \* \*

17. Remove Section 22.157.
18. Remove Section 22.159.
19. Remove Section 22.161.
20. Remove and reserve paragraphs (a)(3) and (a)(5) of Section 22.313.
21. Revise Section 22.351 in its entirety to read as follows:

**§ 22.351 Channel assignment policy.**

The channels allocated for use in the Public Mobile Services are listed in the applicable subparts of this part. Channels and channel blocks are assigned in such a manner as to facilitate the rendition of service on an interference-free basis in each service area. Except as otherwise provided in this part, each channel or channel block is assigned exclusively to one licensee in each service area. All applicants for, and licensees of, stations in the Public Mobile Services shall cooperate in the selection and use of channels in order to minimize interference and obtain the most efficient use of the allocated spectrum.

22. In Section 22.352, revise the first sentence of the introductory text, as follows:



**§ 22.352 Protection from interference.**

Public Mobile Service stations operating in accordance with applicable FCC rules and the terms and conditions of their authorizations are normally considered to be non-interfering. \* \* \*

\* \* \* \* \*

23. Revise Section 22.357 in its entirety to read as follows:

**§ 22.357 Emission types.**

Any authorized station in the Public Mobile Services may transmit emissions of any type(s) that comply with the applicable emission rule, *i.e.* § 22.359, § 22.861 or § 22.917.

24. Revise Section 22.359 in its entirety to read as follows:

**§ 22.359 Emission limitations.**

The rules in this section govern the spectral characteristics of emissions in the Public Mobile Services, except for the Air-Ground Radiotelephone Service (see § 22.861, instead) and the Cellular Radiotelephone Service (see § 22.917, instead).

(a) *Out of band emissions.* The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least  $43 + 10 \log (P)$  dB.

(b) *Measurement procedure.* Compliance with these rules is based on the use of measurement instrumentation employing a resolution bandwidth of 30 kHz or more. In the 60 kHz bands immediately outside and adjacent to the authorized frequency range or channel, a resolution bandwidth of at least one percent of the emission bandwidth of the fundamental emission of the transmitter may be employed. A narrower resolution bandwidth is permitted in all cases to improve measurement accuracy provided the measured power is integrated over the full required measurement bandwidth (*i.e.*, 30 kHz or 1 percent of emission bandwidth, as specified). The emission bandwidth is defined as the width of the signal between two points, one below the carrier center frequency and one above the carrier center frequency, outside of which all emissions are attenuated at least 26 dB below the transmitter power.

(c) *Alternative out of band emission limit.* Licensees in the Public Mobile Services may establish an alternative out of band emission limit to be used at specified frequencies (band edges) in specified geographical areas, in lieu of that set forth in this section, pursuant to a private contractual arrangement of all affected licensees and applicants. In this event, each party to such contract shall maintain a copy of the contract in their station files and disclose it to prospective assignees or transferees and, upon request, to the FCC.

(d) *Interference caused by out of band emissions.* If any emission from a transmitter operating in any of the Public Mobile Services results in interference to users of another radio service, the FCC may require a greater attenuation of that emission than specified in this section.